## INTERNATIONAL SEARCH REPORT

al Application No PCT/CA 03/01436

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 E2187/28 E218 E21B17/10 E21B7/04 F16L58/04 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 E21B F16L Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X GB 2 124 325 A (RYAN AND SONS LTD D 1,5, J; BRITISH GAS CORP) 17-23 15 February 1984 (1984-02-15) page 1, line 102-105 page 1, line 117 -page 2, line 2 page 2, line 17-24 figure 1 Υ 2-4,6,7,37,38 US 4 319 648 A (CHERRINGTON MARTIN O) 2,3 16 March 1982 (1982-03-16) the whole document Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the A document defining the general state of the art which is not considered to be of particular relevance invention earlier document but published on or after the international 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-ments, such combination being obvious to a person skilled citation or other special reason (as specified) document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed in the art. "8" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 7 June 2004 17/06/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

Form PCT/ISA/210 (second sheet) (January 2004)

Schouten, A

## INTERNATIONAL SEARCH REPORT

Internation Application No PCT/CA 03/01436

	tion) DOCUMENTS CONSIDERED TO BE RELEVANT	
itegory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
(	GB 2 166 065 A (WEBCO LTD) 30 April 1986 (1986-04-30) , sentences 25-39 abstract	24,25, 29,36
,	figure 1	4,6,37, 38
	US 2 158 771 A (BECKWITH LAWTON B) 16 May 1939 (1939-05-16) column 1, line 12-33 column 2, line 27-51	24-26,36
	figures 1,2	7
	US 5 621 025 A (TRAN BANG T ET AL) 15 April 1997 (1997-04-15) column 5, line 35-54	24
	<b></b>	

Form PCT/ISA/210 (continuation of second sheet) (January 2004)

100 DV

page 2 of 2

## INTERNATIONAL SEARCH REPORT

nation on patent family members

Internation Application No PCT/CA 03/01436

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
GB 2124325	A	15-02-1984	CA CA CA DE DE EP GB IE IE JP JP US US	1191356 A1 1195128 A2 1204294 C 1204294 A2 3176344 D1 3176812 D1 0053480 A1 0094694 A2 2092701 A ,B 2152624 A ,B 52281 B1 52282 B1 52280 B1 1303531 C 57120789 A 60027873 B 4505302 A 4738565 A 4720211 A	06-08-1985 15-10-1985 13-05-1986 13-05-1986 10-09-1987 25-08-1988 09-06-1982 23-11-1983 18-08-1982 07-08-1985 02-09-1987 02-09-1987 02-09-1987 28-02-1986 27-07-1982 01-07-1985 19-03-1988 19-01-1988
US 4319648	A	16-03-1982	AU BE CA CE ES GB GB JP KR NO US US	540641 B2 6263480 A 885348 A1 1140106 A1 1151146 A2 1151147 A2 3035876 A1 8200430 A1 8204491 A1 2477216 A1 2061357 A ,B 2103690 A ,B 2131066 A ,B 1129273 B 1371534 C 56055699 A 61040840 B 8400143 B1 151874 A 8005279 A ,B 802813 A 4402372 A 4401170 A RE32267 E	29-11-1984 09-04-1981 16-01-1981 25-01-1983 02-08-1983 02-08-1983 09-04-1981 16-01-1982 01-08-1982 04-09-1981 13-05-1981 23-02-1983 13-06-1984 04-06-1986 07-04-1987 16-05-1981 11-09-1986 20-02-1984 17-04-1985 26-03-1981 25-03-1981 25-03-1981 25-03-1983 30-08-1983 21-10-1986
GB 2166065	A 	30-04-1986	NONE		
US 2158771	Α	16-05-1939	NONE		
US 5621025	Α	15-04-1997	US US US US US	5464886 A 5573855 A 5580659 A 5567528 A 5580611 A	07-11-1995 12-11-1996 03-12-1996 22-10-1996 03-12-1996

Form PCT/ISA/210 (patent family annex) (January 2004)

, . . . V. WV uu